#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.21

## WELDING WITNESS REPORT

Resident Engineer: Pursell, Gary **Report No:** WWR-000357 Address: 333 Burma Road Date Inspected: 25-Jul-2007

City: Oakland, CA 94607

**OSM Arrival Time:** 800 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 Prime Contractor: American Bridge/Fluor Enterprises, a JV

**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

Witness:	Procee	dure Qualification Record	Welder Qual	lification	Fracture Critical	
	Weldi	ng NDT	Mechnical T	esting, describe:		
Index Lot #:	: B71-047	7-07a	Witness Lot #: B71-047-07			
<b>Bridge No:</b> 34-0006			<b>Component:</b> Bid: 52,55 Tower & Girder			
Welder:	Zhu Hai	Ping	<b>ID</b> #:	N/A		
Joint Description:		B-U2a	N/A	WPS ID #:	PWPS-B-T-3214 Rev. 1	N/A
Base Metal:		A709M HPS 485 W	N/A	PQR ID#:	HP2007249-1	N/A
Thickness:		25 mm	N/A	<b>Process:</b>	SMAW	N/A
Electrode Spec/Class: AWS-A5.1/E-7018-1			N/A	<b>Positions:</b>	4-G	N/A
<b>Backing Material:</b>		A709 HPS 485 W	N/A	CWI:	Huang Wei and Xu Bing	N/A
Average Am	ıps:	161.8	N/A	<b>AWS Code:</b>	AWS D1.5 (2002)	N/A
Average Vol	lts:	22.6	N/A	<b>Applicable Sec:</b>	AWS 5.13	N/A
Travel Spee	d:	101 mm/min	N/A	<b>Heat Input:</b>	2.16 KJ/mm	N/A
Preheat:		125 Celsius	N/A			

### **Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector was present as requested to witness the welding of the Procedure Qualification Record(PQR) test plate HP 2007249-1 using the shielded metal arc welding (SMAW) electrode specification/classification A5.1/E-7018-1 brand name THJ506Fe-1, diameter of electrode 4.0 mm in the 4-G position. The welding was performed per the AWS D1.5, Section 5.13 Production Procedure WPS. Total of passes/layers were 17 passes and 7 layers. The welding of the test coupon appeared to be in compliance with the contract documents.

The QA inspector did not observe any significant air movement by testing area during welding.

### **Summary of Conversations:**

The QA inspector did not have any significant conversations on this date.

# WELDING WITNESS REPORT

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is in general conformance with the contract requirements.

**Observed welding, testing or results:** 

is not in conformance with the contract requirements.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Acuna, Alfredo	Quality Assurance Inspector
Reviewed By:	McClary,David	QA Reviewer